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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,175	04/19/2004	Habib Vafi	146442	3174
23413	7590	11/15/2004		
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			EXAMINER GILMAN, ALEXANDER	
			ART UNIT	PAPER NUMBER
			2833	
DATE MAILED: 11/15/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/709,175	<b>Applicant(s)</b> VAFI ET AL.	
	<b>Examiner</b> Alexander D Gilman	<b>Art Unit</b> 2833	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 15-34 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### **Election-Restriction**

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-14, drawn to product made, classified in class 439.
- II. Claims 15-25, drawn to apparatus for assembling, classified in class 257
- III. Claims 26-34, drawn to method of assembling, classified in class 29. The inventions are

distinct, each from the other because of the following reasons:

Inventions II and I are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case the connector can be made with apparatus which does not require porous rigid element comprising a plurality of heater elements.

Inventions III and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the connector can be made with method which does not require porous rigid element comprising a plurality of heater elements.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with David Arnold on 10/25/2004 a provisional election was made without traverse to prosecute the invention of product made, claims 1-14. Affirmation of this election must be made by applicant in replying to this Office action. Claims 15-34 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Farnworth et al.

Farnworth et al (US 6,710,612) disclose (Fig. 5) an electronic assembly comprising:

a first layer (47) having a first interface surface and a plurality of cavities (49) formed in the first interface surface,

a second layer (87) having a second interface surface and a plurality of projections (55) disposed at the second interface wherein the plurality of projections are aligned with and disposed at the plurality of cavities,

, and an electrically conductive connecting material disposed at the plurality of cavities such that the connecting material connects the plurality of projections to the respective plurality of cavities.

Claims 1, 8- 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawakami et al.

With regard to claim 1, 9,10, Kawakami et al (US 6,496,162) disclose (Fig. 4, 6) an electronic assembly comprising:

a first layer (2) having a first interface surface and a plurality of cavities formed in the first interface surface,

a second layer (30) having a second interface surface and a plurality of projections (31) disposed at

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the second interface wherein the plurality of projections are aligned with and disposed at the plurality of cavities,

, and an electrically conductive connecting material (col. 3, lines 54-56) disposed at the plurality of cavities such that the connecting material connects the plurality of projections to the respective plurality of cavities.

With regard to claims 8, 10, Kawakami et al disclose that the first layer (2) comprises a ceramic substrate',

the second layer comprises a diode array having a plurality of backlit photodiodes in electrical communication with the plurality of projections, and the connecting material comprises a conductive conductive solder.

With regard to claim 11, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

With regard to claims 12-14, the limitations regarding spacing the photodiodes are not patentably significant since they relate to the size of the article under consideration which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141.

Applicants have presented no argument which convinces that the particular geometry of the projections assembly is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for purpose of mounting the fixed assembly to an telescopic boom of a vehicle. In re Dailey, 149 USPQ 47 (CCPA 1976).

Claims 1-7, 9, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Akram et al.

With regard to claims 1, 7, 9, 10, Akram et al (US 6,313,650) disclose (Fig. 8) an electronic assembly comprising:

a first layer (12) having a first interface surface and a plurality of cavities (20) formed in the first interface surface,

a second layer (68) having a second interface surface and a plurality of projections (70) disposed at

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the second interface wherein the plurality of projections are aligned with and disposed at the plurality of cavities,

, and an electrically conductive connecting material (14) disposed at the plurality of cavities such that the connecting material connects the plurality of projections to the respective plurality of cavities.

With regard to claim 2, Akram et al disclose that the plurality of cavities are formed having a depth  $d$  in the first interface surface, the first interface surface is disposed apart from the second interface surface by a gap  $g$ ; and the plurality of projections have a length  $h$  that is equal to or less than the sum of the depth  $d$  and the gap  $g$ .

With regard to claims 3-6, Akram et al disclose that the plurality of projections have geometrical characteristics claimed (col. 1, lines 59-60; col. 6, lines 18-28).

Moreover, the above mentioned limitations are not patentably significant since they relate to the size of the article under consideration which is not ordinarily a matter of invention. In re Yount, 36 C.C.P.A. (Patents) 775, 171 F.2d 317, 80 USPQ 141.

Applicants have presented no argument which convinces that the particular geometry of the projections assembly is significant or is anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for purpose of mounting the fixed assembly to an telescopic boom of a vehicle. In re Dailey, 149 USPQ 47 (CCPA 1976).

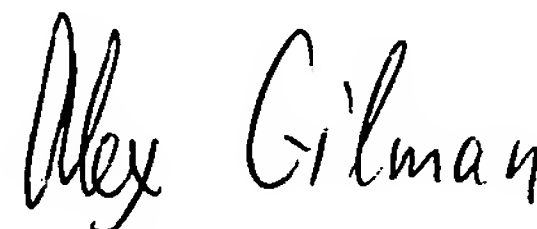
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander D Gilman whose telephone number is 571 272-2004. The examiner can normally be reached on Monday-Friday, 10:30 a.m. - 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on 571 272-2800 ext. 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

11/08/2004

A handwritten signature in black ink that reads "Alex Gilman". The signature is written in a cursive, flowing style.

**ALEXANDER GILMAN  
PRIMARY EXAMINER**